

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

Molly Joseph Ward Secretary of Natural Resources 4949A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 www.deq.virginia.gov

David K. Paylor Director

Michael P. Murphy Regional Director

December 17, 2014

Mr. Harold S. Thacker Director of Post Collection Operations Maplewood Recycling and Waste Disposal 20221 Maplewood Rd. Jetersville, VA 23083

> Location: Amelia County Registration No.: 30993

Dear Mr. Thacker:

Attached is a renewal of your Title V permit to operate a municipal solid waste land recycling and disposal facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. <u>Please read all conditions carefully.</u>

This approval to operate does not relieve Maplewood Recycling and Waste Disposal of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director Department of Environmental Quality P.O. Box 1105 Richmond, VA 23218 In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5020.

Sincerely,

Kyle Ivar Winter, P.E. Deputy Regional Director

KIW/AMS/30993 018 2014 Title V permit renewal.docx

Attachments: Permit

Links to the regulations below:

http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR

40 CFR 60, Subpart WWW

40 CFR 60, Subpart IIII

40 CFR 61, Subpart M

40 CFR 63, Subpart AAAA

40 CFR 63, Subpart ZZZZ

40 CFR 63, Subpart CCCCCC

cc: Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III Inspector, Air Compliance



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David K. Paylor Director

Michael P. Murphy Regional Director

### Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Waste Management of Virginia, Inc.

Facility Name:

Maplewood Recycling and Disposal Facility

Facility Location:

20221 Maplewood Rd.

Jetersville, VA 23083

Registration Number:

Permit Number:

30993 PRO30993

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 3 through 27) State Only Enforceable Requirements (Page 27)

January 1, 2015

Effective Date

December 31, 2019

**Expiration Date** 

Kyle Winter, P.E., Deputy Regional Director

Signature Date

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# **Facility Information**

# **Permittee**

Waste Management of Virginia, Inc. d.b.a. Maplewood Recycling and Disposal Facility 20221 Maplewood Rd. Jetersville, VA 23083

### Responsible Official

Mr. Harold S. Thacker Director of Post Collection Operations

### **Facility**

Maplewood Recycling and Disposal Facility 20221 Maplewood Rd. Jetersville, VA 23083

### Contact Person

Mr. Brian McClung Senior District Manager (804) 561-5787

County-Plant ID No.: 007-0010

<u>Facility Description</u>: NAICS 562212 - This facility consists of a municipal solid waste (MSW) landfill that collects the landfill gas and burns it primarily in flares. The facility may also supply the landfill gas as an alternative fuel in the INGENCO plant (separate facility permit).

The Maplewood Recycling and Disposal Facility (Maplewood Landfill) is a non-hazardous MSW land recycling and disposal facility located at 20221 Maplewood Road, Jetersville, VA (Amelia County) and operated by Waste Management of Virginia, Inc. This facility consists of a MSW landfill that is a generator of landfill gas, including non-methane organic compounds (NMOCs). The facility also processes coal combustion by-products (i.e., fly ash).

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# Emission Unit and Control Equipment Identification

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Landfill (PO1)							
PO1 LF-1	LF-1	Municipal Solid Waste Landfill Phases 1 through 34.	Municipal Solid Waste 43,000,000 cubic yards of Landfill Phases 1 combined waste.	Utility flare	CF-1	NMOC, VOC, methane	October 16, 2014
Flares							
POI CF-1	CF-1	Parnel Biogas Open Utility Flare	98.3 MMBtu/hr 3000 SCFM and equipped with a blower	None	None	None	October 16, 2014
			with a maximum flow rating of 3000 SCFM,				
PO1 CF-2	CF-2	Pamel Biogas Open	98.3 MMBtu/hr 3000 SCFM	None	None	None	October 16, 2014
		Utility Flare	and equipped with a blower with a maximum flow rating				
Fly Ash Processing Equipment (PO2)	ssing Equipm	nent (PO2)	of Society.				
PO2 Silo 1	S-1	Fly Ash Silo	100 ton storage capacity	Bin Vent Filter	None	None	October 15, 2014
PO2 Silo 2	S-2	Fly Ash Silo	100 ton storage capacity	Bin Vent Filter	None	None	October 15, 2014
PO2 C-1	<u>ن</u>	Conveyor	300 tons/hr	None	None	None	October 15, 2014
PO2 C-2	C-2	Conveyor	300 tons/hr	None	None	None	October 15, 2014

Emission	Stool: ID	Emission Unit	
Unit ID	Stack ID	Description	Size/Kated Capacity*
Insignificant A	ctivities Sub	Insignificant Activities Subject to Applicable Requirements	rements
ENG-2	ENG-2	Emergency generator	60 hp
ENG-3	ENG-3	Emergency fire pump	dt 08
AST-3	None	Gasoline storage tank	<10,000 gallons

<sup>\*</sup>The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

# Process Equipment Requirements - Landfill LF-1, CF-1, CF-2

- 1. Process Equipment Requirements (LF-1) Limitations Design Capacity The design capacity of the MSW landfill which includes Phases 1 through 34 is 43,000,000 cubic yards. A change in the design capacity may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 2 of 10/16/2014 Permit)
- 2. Process Equipment Requirements (LF-1) Limitations Fugitive Dust Emission Control Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ) control measures. (9 VAC 5-80-110 and Condition 6 of 10/16/2014 Permit)
- 3. Process Equipment Requirements (LF-1, CF-1, CF-2) Limitations Landfill Gas Collection and Control System The permittee shall operate the active landfill gas (LFG) collection and control system for the Maplewood Landfill Facility in the following manner:
  - a. Design the system to handle the maximum expected gas flow rate from Phases 1 through 34 which is being required to be re-calculated using the procedures listed in 40 CFR 60.755(a)(1) and with the methane generation rate constant as determined in the revised active gas collection and control system design plan approved by the Piedmont Regional Office. The maximum expected gas flow rate shall be recalculated when additional cells other than those listed are proposed for landfill expansion and the LFG system shall be redesigned to handle the maximum expected gas flow rate from the entire area of the landfill;
  - b. Collect gas from each area, cell or group of cells in which initial solid waste has been in place for a period of:
    - i. 5 years or more if active;
    - ii. 2 years or more if closed or at final grade:

The following cells are required to have the gas collected and controlled by the listed date based upon the date of first waste placement and the landfill being active:

Phases 5-10 5 Years from date of first waste placement in individual cell 5 Years from date of first waste placement in individual cell 5 Years from date of first waste placement in individual cell

- c. Collect gas at a sufficient extraction rate to meet all operational requirements.
- d. Operate each wellhead under negative pressure except as provided in 40 CFR 60.753 (b).
- e. Operate each interior wellhead in the collection system such that it has a landfill gas temperature less than 55°C and has either a nitrogen content less than 20 percent, as determined by EPA Method 3C; or an oxygen content less than 5 percent, as determined by EPA Method 3A or 3C. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value

demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

- f. Design the system to minimize off-site migration of subsurface gas by installing liners meeting the requirements listed in 40 CFR 258.40 or equivalent as approved DEQ Solid Waste Division for Phases 1 through 34;
- g. Route the collected landfill gas to a treatment system that processes the collected gas for subsequent sale or use, or to a flare as in item h. All emissions from any atmospheric vent from the gas treatment system are also subject to the requirements listed in h;
- h. Control landfill gas emissions by routing the collected landfill gas to the open flares, CF-1 and/or CF-2;
- i. Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill (40 CFR 60.753(d)). A change in items g and h may require a permit to modify and operate.

(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 3 of 10/16/2014 Permit)

- 4. Process Equipment Requirements (CF-1, CF-2) Limitations Open Flare Requirements The Parnel Biogas Utility Flares (CF-1 and CF-2) shall be subject to the following requirements listed in 40 CFR 60.18 and 40 CFR 60.756.
  - a. A non-assisted flare type shall be installed.
  - b. The net heating value for the landfill gas being combusted shall be 200 BTU/SCF or greater and determined according to methods listed in 40 CFR 60.18(f)(3), 40 CFR 60.754(e), or other methods approved by EPA, Region III.
  - c. The exit velocity shall be less than 60 FT/SEC except when the net heating value for the landfill gas is greater than 1,000 BTU/SCF OR the exit velocity is less than V<sub>MAX</sub> and less than 400 FT/SEC. The exit velocity shall be determined using the applicable methods listed in 40 CFR 60.18(f)(4), 40 CFR 60.18(f)(5), and 40 CFR 60.754(e), or other methods approved by EPA, Region III.
  - d. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, shall be installed at the flare's pilot light or the flame itself to indicate the continuous presence of a flame.
  - e. A gas flow-meter shall be installed, calibrated, and maintained to record the landfill gas flow to the flare at minimum every 15 minutes.
  - (9 VAC 5-50-410, 9 VAC 5-80-110, and Condition 4 of 10/16/2014 Permit)
- 5. Process Equipment Requirements (CF-1, CF-2) Limitations Open Flare Requirements The Parnel Biogas Utility Flares (CF-1 and CF-2) shall operate within the following parameters to ensure that the emission factors for carbon monoxide (0.15 lb/MMBTU) and nitrogen oxides as NO<sub>2</sub> (0.068 lb/MMBTU) are met:
  - a. A landfill gas flow rate from 300 SCFM (minimum) to 3,000 SCFM (maximum).

- A maximum heat input of 98.3 MMBTU/hour (HHV), which shall be demonstrated using the procedures listed in Condition 22.o.
- A methane concentration in the landfill gas from 30% (minimum) to 60% (maximum). (9 VAC 5-50-410, 9 VAC 5-80-110, and Condition 5 of 10/16/2014 Permit)
- Process Equipment Requirements (LF-1) Limitations Gas Collection and Control System Design Plan – The permittee shall maintain a gas collection and control system design plan. Upon request from the DEQ, the permittee shall submit a revised gas collection and control system design plan to the Piedmont Regional Office for approval if current landfill parameters change. (9 VAC 5-80-110 and Condition 9 of 10/16/2014 Permit)
- Process Equipment Requirements (LF-1) Limitations Startup, Shutdown & Malfunction (SSM) Plan - The permittee must develop a written SSM plan according to

the provisions of 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.

(9 VAC 5-60-100 and 9 VAC 5-80-110)

- Process Equipment Requirements (CF-1, CF-2) Limitations Operation of LFG Collection and Control System – The gas control system, which consists of the Parnel Biogas Utility Flares (CF-1 and/or CF-2) shall be in operation when the collected gas is routed to it. The gas mover system shall be shut down and all valves in the collection and control system allowing atmospheric venting of landfill gases shall be closed within 1 hour if the collection or control system is inoperable. (9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 11 of 10/16/2014 Permit)
- Process Equipment Requirements (CF-1, CF-2) Limitations Fuel The approved fuel for the Parnel Biogas Utility Flares (CF-1 and CF-2) is landfill gas. The flares may also use propane gas to ignite the pilot flame in each flare. A change in fuel may require a permit to modify and operate.
  - (9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 12 of 10/16/2014 Permit)
- 10. Process Equipment Requirements (CF-1, CF-2) Limitations -Fuel The Parnel Biogas Utility Flares (CF-1 and CF-2) each shall consume no more than 1,576,800,000 cubic feet of landfill gas (LFG) per year, calculated monthly as the sum of each consecutive 12 month period.
  - (9 VAC 5-80-110 and Condition 13 of 10/16/2014 Permit)
- 11. Process Equipment Requirements (CF-1, CF-2) Limitations Visible Emission Limit – The Parnel Biogas Utility Flares (CF-1 and CF-2) shall be operated with no visible emissions, as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during two consecutive hours. This condition applies at all times except during startup, shutdown and malfunction.
  - (9 VAC 5-80-110, 40 CFR 60.18(c)(1), and Condition 14 of 10/16/2014 Permit)

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12. Process Equipment Requirements - (CF-1, CF-2) - Limitations - Emission Limits - Emissions from the operation of each of the Parnel Biogas Utility Flares (CF-1 and CF-2) shall not exceed the limits specified below:

Particulate Matter	1.8 lbs/hr	8.0 tons/year
PM10	1.8 lbs/hr	8.0 tons/year
PM2.5	1.8 lbs/hr	8.0 tons/year
Sulfur Dioxide	1.6 lbs/hr	7.0 tons/year
Nitrogen Oxides	6.7 lbs/hr	29.3 tons/year
Carbon Monoxide	14.8 lbs/hr	64.6 tons/year
Non-Methane Organic Compounds	1.2 lbs/hr	5.1 tons/year
Volatile Organic Compounds	0.5 lbs/hr	2.0 tons/year
(9 VAC 5-80-110 and Condition	n 15 of 10/16/2014 Permit)	

13. Process Equipment Requirements - (CF-1, CF-2) - Limitations - Emission Limits - Emissions from the operation of both the Parnel Biogas Utility Flares (CF-1 and CF-2) combined shall not exceed the limits specified below:

Particulate Matter	16.1 tons/year
PM10	16.1 tons/year
PM2.5	16.1 tons/year
Sulfur Dioxide	14.0 tons/year
Nitrogen Oxides	58.6 tons/year
Carbon Monoxide	129.3 tons/year
Non-Methane Organic Compounds	10.2 tons/year
Volatile Organic Compounds (9 VAC 5-80-110 and Condition 16 of 10/16/2014 Permit)	3.9 tons/year

14. Process Equipment Requirements - (CF-1, CF-2) - Limitations - Emission Factors - The following emission factors (or others approved by the Piedmont Regional Office) shall be used to calculate emissions from the open flares:

Particulate Matter/PM <sub>10</sub>	17.0	lbs/mmcf CH <sub>4</sub>
Sulfur Dioxide	8.9	lbs/mmcf LFG*
Nitrogen Oxides	0.068	lbs/mmBtu
Carbon Monoxide	0.15	lbs/mmBtu
Non-Methane Organic Compounds	6.5	lbs/mmcf LFG*
Volatile Organic Compounds	2.5	lbs/mmcf LFG*

<sup>\*</sup>These emission factors are based on 60% methane in the LFG, which represents the maximum methane percentage the flare manufacturers will guarantee. Actual methane percentages may be less. The sulfur concentration is assumed to be 46.9 ppm. (9 VAC 5-80-110 and Condition 17 of 10/16/2014 Permit)

- 15. Process Equipment Requirements (LF-1, CF-1, CF-2) Testing Procedure Determination of NMOC Concentration and LFG Flow Rate After the installation of a gas collection and control system in compliance with 40 CFR 60.755, the permittee shall determine the actual NMOC concentration and LFG flow rate and shall calculate the NMOC emission rate in accordance with 40 CFR 60.754 (b) for determining when the GCCS can be removed per 40 CFR 60.752(b)(2)(v), this requirement is applicable upon closure of the landfill and a minimum of 15 years of GCCS operation.

  (9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 18 of 10/16/2014 Permit)
- 16. Process Equipment Requirements Monitoring Requirements LFG Collection System The operation of the gas collection system shall be monitored as follows:
  - a. The following items shall be monitored each month:
    - i. Gauge pressure, each well.
    - ii. LFG temperature, each well.
    - iii. Nitrogen concentration or oxygen concentration, each well.
    - iv. Cover integrity.
  - b. The methane concentration at the landfill surface shall be monitored at least once every quarter.
  - c. The methane concentration of the landfill gas feeding flares CF-1 and CF-2 shall be monitored at least once every month when landfill gas is vented to the flare during the monthly timeframe. The monitoring may occur at the common header feeding the flare.
  - (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 19 of 10/16/2014 Permit)
- 17. Process Equipment Requirements (CF-1, CF-2) Monitoring Requirements LFG Control System The operation of the gas control system shall be monitored as follows:
  - a. Landfill gas flow, recorded at least once every 15 minutes for open flares CF-1 and CF-2.

- b. The presence of the pilot flame or the flare flame shall be continuously monitored by a heat sensing device and recorded for open flares CF-1 and CF-2 when landfill gas is being vented to the flare.
- c. Visible emissions monitoring for the flares CF-1 and CF-2 shall be conducted on a weekly basis for a five-minute period, while the flares are operating, for the presence of visible emissions and a log of the results shall be kept. The log shall include the date and time of observations, whether or not there were visible emissions, any necessary corrective action, and the name of the observer. If four consecutive weeks of observations indicate compliance with the visible emission limit in Condition 11, then the frequency of monitoring may revert to a monthly basis. Monitoring shall revert back to a weekly basis if a subsequent monthly observation indicates the presence of visible emissions. Monthly monitoring may resume after another four consecutive weeks with no observed visible emissions.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 20 of 10/16/2014 Permit)

- 18. Process Equipment Requirements (CF-1, CF-2) Monitoring Requirements Corrective Actions If monitoring demonstrates that the requirements of Conditions 3(c), (e), or (i) are not being met, corrective actions shall be taken as specified in 40 CFR 60.755 (a) (3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in 40 CFR 60.755(a)(3) through (5) or 60.755(c), the monitored exceedance for the surface methane operational standard and the wellfield operational standards are not violations of the operational requirements of this permit or 40 CFR 60, Subpart WWW. An alternative timeline or remedy for correcting the exceedance may be submitted to the Administrator for approval in accordance with 40 CFR 60.755(a)(3), (a)(5) and (c)(4)(v). (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 21 of 10/16/2014 Permit)
- 19. Process Equipment Requirements (CF-1, CF-2) Monitoring Requirements Equipment All monitoring equipment required to comply with Subpart WWW (subsection 60.756 (c)) shall be installed and operational within 180 days of the date of actual landfill gas transfer to the Parnel Biogas Utility Flares (CF-1 and CF-2). Verification of satisfactory operation of monitoring equipment shall, at a minimum, include certification that manufacturer's written requirements or recommendations for installation, operation, and calibration of the devices have been followed.

  (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 22 of 10/16/2014 Permit)
- 20. Process Equipment Requirements (CF-1, CF-2) Monitoring Requirements NSPS Requirements The landfill gas collection and control system shall be monitored and all appropriate data recorded as required in Subpart WWW (Subsection 60.756).
  (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 23 of 10/16/2014 Permit)
- 21. Process Equipment Requirements NSPS Requirements Compliance Provisions The provisions of 40 CFR 60, NSPS Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

  (9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 23 of 10/16/2014 Permit)

22. Process Equipment Requirements - (LF-1, CF-1, CF-2) - Recordkeeping - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Current maximum design capacity, current amount of refuse in place, and year by year refuse accumulation rates.
- b. Description, location, amount, and placement date of all non-degradable refuse including asbestos, demolition refuse, and coal ash placed in landfill areas that are excluded from landfill gas estimation or landfill gas collection and control.
- c. Installation date and location of all newly installed wells and collectors.
- d. Map or plot showing each existing and planned well and collector in the gas collection system with each well and collector uniquely identified.
- e. Maximum expected gas generation flow rate calculated according to 40 CFR 60.755(a)(1).
- f. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures listed in 40 CFR 60.759(a)(1).
- g. The type of open flares (i.e. steam-assisted, air-assisted, or non-assisted) used, all visible emission readings, the heat content determination, gas flow rate measurements, and exit velocity determinations made during the required performance tests for open flares CF-1 and CF-2.
- h. The flare pilot flame or flare flame continuous monitoring in the flare stack for open flares CF-1 and CF-2 when landfill gas is being vented to the flare.
- i. All periods of operations when landfill gas is being vented to the open flares CF-1 and CF-2 during which the pilot flame or flare flame is absent for the open flare.
- j. The monthly monitored gauge pressure, temperature, and nitrogen or oxygen concentration for each well.
- k. The results from the monthly cover integrity monitoring and the date of cover repair.
- 1. The quarterly monitored methane concentration 500 ppm and above at the landfill surface and the surface monitoring plan developed for the quarterly monitoring which includes a topographic map with the monitoring route at 30 meter intervals and the rationale for any site-specific deviations from the required intervals.
- m. The monthly monitored methane concentration of the landfill gas feeding flares CF-1 and CF-2 during the monthly timeframe when landfill gas is being vented to the flare. The monitoring may occur at the common header feeding the flare.
- n. The landfill gas flow, recorded at least once every 15 minutes for the open flares CF-1 and CF-2.

- o. The heat input for the open flares CF-1 and CF-2 calculated on a quarterly basis using the lower heating value of methane (911 BTU/SCF), the quarterly highest monitored methane concentration recorded for item m and the corresponding gas flow during this quarterly highest monitored methane concentration.
- p. All exceedances for the monitoring requirements listed in Conditions 16.a and b, the results from any subsequent readings of an exceedance parameter, the location of the exceedance, and the action taken to correct the exceedance.
- q. Updated "as-builts" for the landfill gas collection system when new wells are constructed, or non-functional wells are decommissioned.
- r. Any inoperable periods exceeding 1 hour for the collection or control system, when landfill gas is being vented.
- s. The yearly throughput of landfill gas to the open flares CF-1 and 2, calculated monthly as the sum of each consecutive 12 month period. Emissions calculations for open flares CF-1 and 2.
- t. Date of first waste placement for Phases 1 through 34.
- u. Calculations detailing the maximum design capacity unless, pursuant to 40 CFR 60.757(a)(2)(ii), the maximum design capacity is specified in the facility's solid waste permit.
- v. A copy of the most recent approved gas collection and control system design plan.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-50, 9 VAC 5-50-410 and Condition 24 of 10/16/2014 Permit)

- 23. Process Equipment Requirements (LF-1, CF-1, CF-2) Reporting Compliance Report The semi-annual compliance report shall be submitted to the Piedmont Regional Office by the dates specified below and shall contain the following:
  - a. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756 (a), (b), (c), and (d);
  - b. Description and duration of all periods when the open flares CF-1 and CF-2 were not working for a period exceeding 1 hour and length of time the open flares were not operating when landfill gas was being routed to the flare;
  - c. Description and duration of all periods when landfill gas is diverted from the open flares CF-1 and CF-2 through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756;
  - d. All periods when the collection system was not operating in excess of 5 days;
  - e. The location of each exceedance of the 500 parts per million surface methane concentration, and the concentration recorded at each location for which an exceedance was recorded as provided in 40 CFR 60.755 (c); and

- f. The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a) (3), (b), and (c) (4) of 60.755.
- g. If actions taken during a SSM event are consistent with the procedures in the SSM plan required by Condition 7, it shall be noted in a semi-annual SSM plan report.
- h. All deviations, as noted in 40 CFR 63.1965, that occurred during the 6-month reporting period. A deviation shall be given the meaning as in 40 CFR 63.1990.

Items (a) through (h) shall be submitted semi-annually. Subsequent semi-annual reports shall cover the calendar year (from January through June and July through December). All subsequent semi-annual reports shall be submitted prior to March 1 and September 1 of the calendar year. One copy of the annual compliance report shall be submitted to the U.S. Environmental Protection Agency at the address below.

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-410, 9 VAC 5-60-100, and Condition 25 of 10/16/2014 Permit)

- 24. Process Equipment Requirements (LF-1, CF-1, CF-2) Reporting Closure Report The permittee shall submit a closure report to the Piedmont Regional Office within 30 days of the date the MSW landfill stopped accepting waste. The Administrator may request such additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60.
  (9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 26 of 10/16/2014 Permit)
- 25. Process Equipment Requirements (LF-1, CF-1, CF-2) Reporting Equipment Removal Report The facility shall submit an equipment removal report to the Piedmont Regional Office 30 days prior to the removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following items:
  - a. A copy of the closure report submitted in accordance with Condition 24;
  - b. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
  - c. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in Condition 26 have been met.

(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 27 of 10/16/2014 Permit)

- 26. Process Equipment Requirements (LF-1, CF-1, CF-2) Emission Standards Removal of LFG Collection and Control System The collection and control system may be capped or removed provided that all the following conditions are met:
  - a. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in Condition 24;
  - b. The collection and control system shall have been in operation a minimum of 15 years; and
  - c. Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
  - (9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 28 of 10/16/2014 Permit
- 27. Process Equipment Requirements (LF-1, CF-1, CF-2) Notifications The permittee shall furnish written notification to the Director, Piedmont Regional Office of any modifications to the gas collection and control system design plan that was submitted July 2000 and any subsequent plans approved by the Piedmont Regional Office at least 90 days prior to such date. Modification examples include, but are not limited to: installing control devices other than open flares CF-1 and CF-2, changes in the treatment system that processes the collected gas for subsequent sale or use or installation of blowers other than those attached to open flares CF-1 and CF-2.

  (9 VAC 5-80-110 and Condition 31 of 10/16/2014 Permit)
- 28. Process Equipment Requirements (LF1) Operation of Landfill Asbestos disposal In addition to the requirements of General Condition 74 regarding the handling of asbestos-containing waste materials, if any asbestos-containing waste materials are accepted at the facility, the requirements of 40 CFR 61.154 shall be followed. (9 VAC 5-80-110 and 40 CFR 61 Subpart M)
- 29. Process Equipment Requirements (LF-1) Operation of Landfill Requirements by Reference Except where this permit is more restrictive than the applicable requirements, the MSW landfill, including the gas collection and control system, shall be constructed and operated in accordance with 40 CFR 60, Subpart WWW and 40 CFR 63 NESHAP Subpart AAAA. This includes the reporting requirements of 40 CFR 60.757 and 40 CFR 63.1980. (9 VAC 5-80-110, 9 VAC 5-50-410, 9 VAC 5-60-100 and Conditions 7, 8 and 10 of 10/16/2014 Permit)

Process Equipment Requirements - Fly ash processing facility S-1, S-2, C-1, C-2

30. Process Equipment Requirements - (S-1, S-2) - Limitations - Emission Controls - Particulate emissions from the Silos (S-1, S-2) shall be controlled by a bin vent filter. Particulate emissions from the truck load-out shall be controlled by the use of a curtain

around the pug mill discharge to the top of the dump truck and/or wet suppression or equivalent. The controls listed above shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation. The chute and enclosure(s) shall be maintained in good condition without tears or holes. (9 VAC 5-80-110 and Condition 2 of 10/15/2014 Permit)

31. Process Equipment Requirements (S-1, S-2, C-1, C-2) – Limitations - Fugitive Dust Control - Dust from material handling, fly ash handling and load-outs, shall be controlled by wet suppression or equivalent as needed. The wet suppression spray systems shall be operated at optimum design.

(9 VAC 5-80-110 and Condition 3 of 10/15/2014 Permit)

32. Process Equipment Requirements - (S-1, S-2, C-1, C-2) - Limitations - Production - The throughput of fly ash through the Fly Ash Processing system shall not exceed 438,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 5 of 10/15/2014 Permit)

- 33. Process Equipment Requirements (S-1, S-2) Limitations Visible Emissions Visible emissions from each bin vent filter exhaust stack shall not exceed five percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-80-110 and Condition 7 of 10/15/2014 Permit)
- 34. Process Equipment Requirements (S-1, S-2, C-1, C-2) Limitations Emission Limits Total emissions from the wet fly ash processing facility shall not exceed the limits specified below:

PM <sub>TOTAL</sub> 1.6 lbs/hr 6.9 tons/yr (9 VAC 5-50-260) PM-10 <sub>TOTAL</sub> 0.6 lbs/hr 2.4 tons/yr (9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 32.

(9 VAC 5-80-110, and Condition 6 of 10/15/2014 Permit)

35. Process Equipment Requirements - (S-1, S-2) - Monitoring - Visible Emissions - All silo bin vent filters shall be observed visually once per week, when in operation, to determine if there are any visible emissions. This visual observation shall be performed during the uploading process for at least a brief time period during normal operations. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall keep a log of the observations. The log shall include the name of the

observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.

(9 VAC 5-80-110 and Condition 4 of 10/15/2014 Permit)

- 36. Process Equipment Requirements (S-1, S-2, C-1, C-2) Recordkeeping The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
  - a. Annual throughput of fly ash in tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Records of visible emissions observations as required in Condition 35.
  - c. Record of scheduled and non-scheduled maintenance.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 8 of 10/15/2014)

# Process Equipment Requirements - Stationary water pump engines (Insignificant Activity)

ENG-2, ENG-3

- 37. Process Equipment Requirements NSPS Subpart IIII Requirements 80 hp water pump engine Limitations NSPS Certification As a post 1997 model year, non-emergency, diesel engine, the 80 hp water pump engine (ENG-3) shall be certified to be compliant with Tier 3 standards of 40 CFR 89.112(e). (9 VAC 5-80-110 and 40 CFR 60.4201)
- 38. Process Equipment Requirements NSPS Subpart IIII Requirements 80 hp water pump engine Limitations Emission Standards The 80 hp water pump engine (ENG-3) must comply with the emission standards in 40 CFR 94.8(a)(1). (9 VAC 5-80-110 and 40 CFR 60.4204(b))
- 39. Process Equipment Requirements NSPS Subpart IIII Requirements Water pump engines Limitations The stationary diesel water pump engine (ENG-3) is designed to use diesel fuel. If it becomes necessary to change the type of fuel, the Board must approve the change prior to its use. The diesel fuel used in ENG-3 must meet the requirements of 40 CFR 80.510(b), except that any existing fuel purchased prior to October 1, 2010 may be used until depleted.

(9 VAC 5-80-110 and 40 CFR 60.4207(b))

40. Process Equipment Requirements – MACT Subpart ZZZZ Requirements - Water pump engines - Limitations – Work Practice Requirements – As stated in the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE MACT, Subpart ZZZZ), the owner/operator of the water pump engines (ENG-2 & ENG-3) shall, as a minimum:

- a. Change oil and filter every 1000 hours of operation or annually, whichever comes first, for each engine;
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

During periods of startup, the owner/operator must minimize the time spent at idle and minimize the engines' startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(9 VAC 5-80-110, 40 CFR 63.6625(h) and Table 2d (1) of 40 CFR 63 Subpart ZZZZ)

41. Process Equipment Requirements – Water pump engines – Maintenance – The owner/operator of the existing water pump engine (ENG-2) must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (9 VAC 5-80-110 and 40 CFR 63.6625(e))

# Process Equipment Requirements - Gasoline storage tank (Insignificant Activity) AST-3

- 42. Process Equipment Requirements Gasoline storage tank Work practice requirements The owner/operator of the 500-gallon gasoline storage tank (AST-3) must not allow the gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - a. Minimize gasoline spills;
  - b. Clean up spills as expeditiously as possible;
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use (portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with this paragraph);

d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 (9 VAC 5-80-110 and 40 CFR 63.11116(a) and (d))

43. Process Equipment Requirements – Gasoline storage tank – Recordkeeping – The permittee must have records available within 24 hours of a request by the Administrator to document the facility's gasoline throughput from the gasoline storage tank (AST-3). (9 VAC 5-80-110 and 40 CFR 63.11116(b))

# **Facility Wide Conditions**

- 44. Annual Emission Report for Fee Calculation The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the department.
  (9 VAC 5-80-340(c), 9 VAC 5-80-110 and Condition 29 of 10/16/2014 Permit)
- 45. Facility Wide Conditions Testing The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

  (9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 30 of 10/16/2014 Permit)
- 46. Facility Wide Conditions Testing If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9 VAC 5-80-110)

# Insignificant Emission Units

47. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80- 720C)
LT-1	Leachate Storage Tank	9 VAC 5-80-720B2	VOC/HAPs	260,000 Gallons
LT-2	Leachate Storage Tank	9 VAC 5-80-720B2	VOC/HAPs	260,000 Gallons
LT-3	Leachate Storage Tank (coal combustion by-products monofill cell)	9 VAC 5-80-720B2	None	100,000 Gallons
AST-1	Fuel Oil Storage Tank	9 VAC 5-80-720B2	VOC	10,000 Gallons
AST-2	Fuel Oil Storage Tank	9 VAC 5-80-720C3	VOC	500 Gallons
AST-3	Gasoline Tank	9 VAC 5-80-720C3	VOC	500 Gallons
AST-4	Hydraulic Oil Tank	9 VAC 5-80-720C3	VOC	550 Gallons

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Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80- 720C)
AST-5	Used Oil Tank	9 VAC 5-80-720C3	VOC	550Gallons
AST-6	Transmission Oil Tank	9 VAC 5-80-720C3	VOC	275 Gallons
AST-7	Transmission Oil Tank	9 VAC 5-80-720C3	VOC	275 Gallons
AST-8	Diesel Tank (on fuel truck)	9 VAC 5-80-720B2	VOC	2,000 Gallons
AST-9	Four Oil Tanks (on fuel truck)	9 VAC 5-80-720C3	VOC	300 Gallons each
AST-10	Two Lube Oil Tanks (on service truck)	9 VAC 5-80-720C3	VOC	100 Gallons each
РТ-1	Propane Tank (at shop)	9 VAC 5-80-720B2	VOC	1,000 Gallons
PT-2	Propane Tank (at shop)	9 VAC 5-80-720B2	VOC	1,000 Gallons
PT-3	Propane Tank (equipment wash area)	9 VAC 5-80-720B2	VOC	100 Gallons
PT-4	Propane Tank (equipment wash area)	9 VAC 5-80-720B2	VOC	100 Gallons
PT-5	Propane Tank (forklift)	9 VAC 5-80-720B2	VOC	300 Gallons
PT-6	Propane Tank (at Flare)	9 VAC 5-80-720B2	VOC	100 Gallons
PW-1	Parts Washing Station	9 VAC 5-80-720B2	VOC	15 Gallons
WELD-1	Welder on Service Truck	9 VAC 5-80-720A	VOC	250 Amps
GEN-1	Weld/Generator (gasoline-fueled, portable)	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	10.5 kW
GEN-2	Troy Built Generator (gasoline-fueled, portable)	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	3.55 kW
ENG-1	Honda Air Compressor (gasoline- fueled, portable)	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	5.5 HP
ENG-2	German Rupp pump with John Deere diesel 4039D engine (mfd. April 1995, installed June 1995); existing stationary CI engine.	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	60 HP
ENG-3	Godwin 6" water pump with John Deere Tier 3 diesel 4045 engine (mfd. May 2011, installed June 2011) new stationary CI engine	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	80 HP
LP-1	Sitelite Light Plant	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	25 Amps
LP-2	Sitelite Light Plant	9 VAC 5-80-720C	NO <sub>x</sub> , CO, VOC, SO <sub>2</sub> , PM, HAPs	25 Amps
P-1	Fly Ash Pug Mill	9 VAC 5-80-720B1	PM	25 tons/hr
P-2	Fly Ash Pug Mill	9 VAC 5-80-720B1	PM	25 tons/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

# Permit Shield & Inapplicable Requirements

48. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
9 VAC 5-40-5800 and	Emission Standards and Emission	This article only applies to
40 CFR 60 Subpart Cc	Guidelines for Sanitary Landfills	municipal solid waste landfills
		which commenced construction,
		reconstruction or modification
		prior to May 30, 1991.
40 CFR Subpart Kb	Volatile Liquid Storage Vessels	The leachate in the storage tanks
		has a vapor pressure below the
		NSPS threshold.
40 CFR 64	Compliance Assurance Monitoring	The landfill is subject to an
		NSPS that was proposed after
		11/15/1990.
9 VAC 5-40-880	Emission Standards for Fuel	The flares and engines are not
	Burning Equipment	considered fuel burning
		equipment.
9 VAC 5-40-240	General Process Rule	Equipment subject to permitting
		and BACT so existing rule
		standards are less stringent.
9 VAC 5-40-5200	Emission Standards for Petroleum	The fuel storage tanks contain
	Liquid Storage and Transfer	diesel fuel which is below the
	Operations	1.5 psi vapor pressure
		applicability threshold.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

### **General Conditions**

49. General Conditions - Federal Enforceability - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9 VAC 5-80-110 N) 50. General Conditions - Permit Expiration - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- a. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- b. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- c. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- d. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- e. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

- 51. General Conditions Recordkeeping and Reporting All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.

Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by

(9 VAC 5-80-110 F)

the permit.

- 52. **General Conditions Monitoring Report -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
  - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
    - i. Exceedance of emissions limitations or operational restrictions;
    - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
    - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
     (9 VAC 5-80-110 F)
- 53. General Conditions Annual Compliance Certification Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
  - b. The identification of each term or condition of the permit that is the basis of the certification;
  - c. The compliance status;

- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov (9 VAC 5-80-110 K.5)

54. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition 52 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

- 55. General Conditions Failure/Malfunction Reporting In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office. (9 VAC 5-20-180 C)
- 56. General Conditions Severability The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

  (9 VAC 5-80-110 G.1)

57. General Conditions - Duty to Comply - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

58. General Conditions - Need to Halt or Reduce Activity not a Defense - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

- 59. General Conditions Permit Modification A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

  (9 VAC 5-80-190 and 9 VAC 5-80-260)
- General Conditions Property Rights The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)
- 61. General Conditions Duty to Submit Information
  - a. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
  - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
     (9 VAC 5-80-110 K.1)
- 62. General Conditions Duty to Pay Permit Fees The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to

verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.

(9 VAC 5-80-110 H, 9 VAC 5-80-340 C, 9 VAC 5-80-2340 B and Condition 30 of the 06/17/2009 Permit)

- 63. General Conditions Fugitive Dust Emission Standards During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
  - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
  - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
  - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
  - (9 VAC 5-50-90, Condition 6 of 06/17/2009 Permit and Condition 3 of 10/15/2014 Permit)
- 64. General Conditions Startup, Shutdown, and Malfunction At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

  (9 VAC 5-50-20 E)
- 65. **General Conditions Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to

all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

- 66. **General Conditions Inspection and Entry Requirements -** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
  - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
  - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
     (9 VAC 5-80-110 K.2)
- 67. General Conditions Reopening For Cause The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
  - a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
  - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

68. General Conditions - Permit Availability - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

# 69. General Conditions - Transfer of Permits

- a. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
   (9 VAC 5-80-160)
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

  (9 VAC 5-80-160)

# 70. General Conditions - Malfunction as an Affirmative Defense

- a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements stated in General Condition 70.b are met.
- b. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - i. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - ii. The permitted facility was at the time being properly operated.
  - iii. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - iv. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

d. The provisions of General Condition 70 are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
 (9 VAC 5-80-250)

- 71. General Conditions Permit Revocation or Termination for Cause A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

  (9 VAC 5-80-190 C and 9 VAC 5-80-260)
- 72. **General Conditions Duty to Supplement or Correct Application** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)
- 73. General Conditions Stratospheric Ozone Protection If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)
- 74. General Conditions Asbestos Requirements The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
- 75. General Conditions Accidental Release Prevention If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)
- 76. General Conditions Changes to Permits for Emissions Trading No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
  (9 VAC 5-80-110 I)

77. **General Conditions - Emissions Trading -** Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.
   (9 VAC 5-80-110 I)

# **State-Only Enforceable Requirements**

78. State-Only Enforceable Requirements - The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

Odor: The approved Odor Management and Control Plan describing the practices and technology that will be used to minimize off-site odors and to address odor complaints that may occur shall be an enforceable part of this permit. The plan shall incorporate the use of best available odor control technology that is appropriate for this landfill. The plan shall also describe procedures that will be implemented in response to citizen odor complaints or the detection of significant off-site odors by DEQ staff, including progressive steps that will be taken to reduce odors. A log of all odor complaints received and actions taken shall be kept and made available for inspection by authorized Federal, State or Local officials. The Odor Management and Control Plan shall be reviewed annually by the Facility and evaluated for the need and feasibility of new or modified odor control technology or practices. Results of the annual plan review, a modified plan (if applicable) and a copy of the log shall be submitted to the Piedmont Regional Office by the first day of March of each year.

(Condition 40 of 10/16/2014 Permit) (9 VAC 5-80-110 N and 9 VAC 5-80-300)